

DOE/RL- 88- 21

216- U- 12 Crib

Rev. 3, 6/30/94

Please print or type in the unshaded areas only
(fill-in areas are spaced for elite type, i.e. 12 character/inch).

FORM 3	DANGEROUS WASTE PERMIT APPLICATION		I. EPA/STATE I.D. NUMBER <table border="1" style="display: inline-table; text-align: center; width: 100px;"><tr><td>W</td><td>A</td><td>7</td><td>8</td><td>9</td><td>0</td><td>0</td><td>0</td><td>8</td><td>9</td><td>6</td><td>7</td></tr></table>	W	A	7	8	9	0	0	0	8	9	6	7
W	A	7	8	9	0	0	0	8	9	6	7				
FOR OFFICIAL USE ONLY															
APPLICATION APPROVED	DATE RECEIVED (mo., day, & yr.)	COMMENTS													
		Pending Approval													
II. FIRST OR REVISED APPLICATION															
Place an "X" in the appropriate box in A or B below (mark one box only) to indicate whether this is the first application you are submitting for your facility or a revised application. If this is your first application and you already know your facility's EPA/STATE I.D. Number, or if this is a revised application, enter your facility's EPA/STATE I.D. Number in Section I above.															
A. FIRST APPLICATION (place an "X" below and provide the appropriate date)															
<input type="checkbox"/> 1. EXISTING FACILITY (See instructions for definition of "existing" facility. Complete item below.)		<input type="checkbox"/> 2. NEW FACILITY (Complete item below)													
<table border="1" style="display: inline-table; text-align: center; width: 60px;"><tr><td style="width: 20px;">MO.</td><td style="width: 20px;">DAY</td><td style="width: 20px;">YEAR</td></tr><tr><td>04</td><td>01</td><td>1960</td></tr></table>	MO.	DAY	YEAR	04	01	1960	*FOR EXISTING FACILITIES, PROVIDE THE DATE (mo., day, & yr.) OPERATION BEGAN OR THE DATE CONSTRUCTION COMMENCED (use the boxes to the left) *The date construction of the Hanford Facility commenced.								
MO.	DAY	YEAR													
04	01	1960													
<table border="1" style="display: inline-table; text-align: center; width: 60px;"><tr><td style="width: 20px;">MO.</td><td style="width: 20px;">DAY</td><td style="width: 20px;">YEAR</td></tr><tr><td> </td><td> </td><td> </td></tr></table>		MO.	DAY	YEAR				FOR NEW FACILITIES, PROVIDE THE DATE, (mo., day, & yr.) OPERATION BEGAN OR IS EXPECTED TO BEGIN							
MO.	DAY	YEAR													
B. REVISED APPLICATION (place an "X" below and complete Section I above)															
<input checked="" type="checkbox"/> 1. FACILITY HAS AN INTERIM STATUS PERMIT		<input type="checkbox"/> 2. FACILITY HAS A FINAL PERMIT													
III. PROCESS - CODES AND CAPACITIES															
A. PROCESS CODE - Enter the code from the list of process codes below that best describes each process to be used at the facility. Ten lines are provided for entering codes. If more lines are needed, enter the code(s) in the space provided. If a process will be used that is not included in the list of codes below, then describe the process (including its design capacity) in the space provided on the (Section III-C).															
B. PROCESS DESIGN CAPACITY - For each code entered in column A enter the capacity of the process.															
1. AMOUNT - Enter the amount.															
2. UNIT OF MEASURE - For each amount entered in column B(1), enter the code from the list of unit measure codes below that describes the unit of measure used. Only the units of measure that are listed below should be used.															
PROCESS	PRO- CESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY	PROCESS												
Storage:			Treatment:												
CONTAINER (barrel, drum, etc.)	S01	GALLONS OR LITERS	TANK												
TANK	S02	GALLONS OR LITERS	T01												
WASTE PILE	S03	CUBIC YARDS OR CUBIC METERS	T02												
SURFACE IMPOUNDMENT	S04	GALLONS OR LITERS	T03												
Disposal:			T04												
INJECTION WELL	D80	GALLONS OR LITERS	OTHER (Use for physical, chemical, thermal or biological treatment processes not occurring in tanks, surface impoundments or incinerators. Describe the processes in the space provided: Section III-C.)												
LANDFILL	D81	ACRE-FEET (the volume that would cover one acre to a depth of one foot) OR HECTARE-METER	GALLONS PER DAY OR LITERS PER DAY												
LAND APPLICATION	D82	ACRES OR HECTARES													
OCEAN DISPOSAL	D83	GALLONS PER DAY OR LITERS PER DAY													
SURFACE IMPOUNDMENT	D84	GALLONS OR LITERS													
UNIT OF MEASURE	UNIT OF MEASURE CODE	UNIT OF MEASURE	UNIT OF MEASURE CODE												
GALLONS	G	LITERS PER DAY	V												
LITERS	L	TONS PER HOUR	D												
CUBIC YARDS	Y	METRIC TONS PER HOUR	W												
CUBIC METERS	C	GALLONS PER HOUR	E												
GALLONS PER DAY	U	LITERS PER HOUR	H												
ACRE-FEET	A	HECTARE-METER	F												
HECTARE-METER	F	ACRES	B												
ACRES	B	HECTARES	Q												
HECTARES	Q														
EXAMPLE FOR COMPLETING SECTION III (shown in line numbers X-1 and X-2 below): A facility has two storage tanks; one tank can hold 200 gallons and the other can hold 400 gallons. The facility also has an incinerator that can burn up to 20 gallons per hour.															
A. PROCESS		B. PROCESS DESIGN CAPACITY													

LINE NUMBER	CODE (from list above)	1. AMOUNT (specify)	2. UNIT OF MEASURE (enter code)	FOR OFFICIAL USE ONLY			
X-1	S02	600	G				
X-2	T03	20	E				
1	D81	50,000	U				
2							
3							
4							
5							
6							
7							
8							
9							
10							

C. SPACE FOR ADDITIONAL PROCESS CODES OR FOR DESCRIBING OTHER PROCESS (CODE "T04"). FOR EACH PROCESS ENTERED HERE INCLUDE DESIGN CAPACITY.

D81

The 216-U-12 Crib was used to dispose of UO_3 (uranium-oxide) Plant corrosive process condensate. The 216-U-12 Crib, a percolation unit, was designed to receive mixed waste from the UO_3 Plant for approximately 5 minutes every hour, 100 gallons (379 liters) per minute, and to dispose of the process condensate by percolation into the soil column.

Process condensate discharges were considered only a dangerous waste due to corrosivity caused by UO_3 Plant operations. After January 1987, process condensate was administratively controlled to prevent corrosive dangerous waste discharge to the 216-U-12 Crib. The unit continued to receive process condensate until the crib pipeline was cut and permanently capped on January 30, 1988. The 216-U-12 Crib will be closed under interim status.

IV. DESCRIPTION OF DANGEROUS WASTES

A. **DANGEROUS WASTE NUMBER** - Enter the four digit number from Chapter 173-303 WAC for each listed dangerous waste you will handle. If you handle dangerous wastes which are not listed in Chapter 173-303 WAC, enter the four digit number(s) that describe the characteristics and/or the toxic contaminants of those dangerous wastes.

B. **ESTIMATED ANNUAL QUANTITY** - For each listed waste entered in column A estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in column A estimate the total annual quantity of all the non-listed waste(s) that will be handled which possess that characteristic or contaminant.

C. **UNIT OF MEASURE** - For each quantity entered in column B enter the unit of measure code. Units of measuer which must be used and the appropriate codes are:

ENGLISH UNIT OF MEASURE CODE		METRIC UNIT OF MEASURE CODE	
POUNDS	P	KILOGRAMS	K
TONS	T	METRIC TONS	M

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure taking into account the appropriate density or specific gravity of the waste.

D. PROCESSES

1. PROCESS CODES:

For listed dangerous waste: For each listed dangerous waste entered in column A select the code(s) from the list of process codes contained in Section III to indicate how the waste will be stored, treated, and/or disposed of at the facility.

For non-listed dangerous wastes: For each characteristic or toxic contaminant entered in Column A, select the code(s) from the list of process codes contained in Section III to indicate all the processes that will be used to store, treat, and/or dispose of all the non-listed dangerous wastes that possess that characteristic or toxic contaminant.

Note: Four spaces are provided for entering process codes. If more are needed: (1) Enter the first three as described above; (2) Enter "000" in the extreme right box of item IV-D(1); and (3) Enter in the space provided on page 4, the line number and the additional code(s).

2. PROCESS DESCRIPTION: If a code is not listed for a process that will be used, describe the process in the space provided on the form.

NOTE: DANGEROUS WASTES DESCRIBED BY MORE THAN ONE DANGEROUS WASTE NUMBER - Dangerous wastes that can be described by more than one Waste Number shall be described on the form as follows:

- Select one of the Dangerous Waste Numbers and enter it in column A. On the same line complete columns B, C, and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.
- In column A of the next line enter the other Dangerous Waste Number that can be used to describe the waste. In column D(2) on that line enter "Included with above" and make no other entries on that line.
- Repeat step 2 for each other Dangerous Waste Number that can be used to describe the dangerous waste.

EXAMPLE FOR COMPLETING SECTION IV (shown in line numbers X-1, X-2, X-3, and X-4 below) - A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operation. In addition, the facility will treat and dispose of three non-listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

LINE NO.	A. DANGEROUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES				
				1. PROCESS CODES (enter)			2. PROCESS DESCRIPTION (if a code is not entered in D(1))	
X-1	K054	900	P	T03	D80			
X-2	D002	400	P	T03	D80			
X-3	D001	100	P	T03	D80			
X-4	D002			T03	D80			included with above
1	D002	4,454,000	P	D81				Percolation
2								
3								
4								
5								
6								
7								
8								
9								
10								

E. USE THIS SPACE TO LIST ADDITIONAL PROCESS CODES FROM SECTION D(1) ON PAGE 3.

The 216-U-12 Crib was used to dispose of corrosive (D002) UO₃ Plant process condensate until January 1987, at which time administrative controls

When the UO₃ Plant was shut down for periods of time, the pH of the process condensate ranged from 2.0 to 4.0. The UO₃ plant has been permanently shut down and no process condensate is being discharged to the 216-U-12 Crib. Past process rates show that approximately 1,700,000 gallons (6,440,000 liters) per year of process condensate were disposed in the 216-U-12 Crib.

All existing facilities must include in the space provided on page 5 a scale drawing of the facility (*see instructions for more detail*).

All existing facilities must include photographs (*aerial or ground-level*) that clearly delineate all existing structures; existing storage, treatment and disposal areas; and sites of future storage, treatment or disposal areas (*see instructions for more detail*).

LATITUDE (degrees, minutes, & seconds)				LONGITUDE (degrees, minutes, & seconds)			

VIII. FACILITY OWNER

- ☒ A. If the facility owner is also the facility operator as listed in Section VII on Form 1, "General Information", place an "X" in the box to the left and skip to Section IX below.
- ☐ B. If the facility owner is not the facility operator as listed in Section VII on Form 1, complete the following items:

1. NAME OF FACILITY'S LEGAL OWNER

2. PHONE NO. (area code & no.)

3. STREET OR P.O. BOX

4. CITY OR TOWN

5. ST.

6. ZIP CODE

IX. OWNER CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

NAME (print or type)

SIGNATURE

DATE SIGNED

John D. Wagoner, Manager
U.S. Department of Energy
Richland Operations Office

John D. Wagoner

06/30/1994

X. OPERATOR CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

NAME (print or type)

SIGNATURE

DATE SIGNED

SEE ATTACHMENT

X. OPERATOR CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

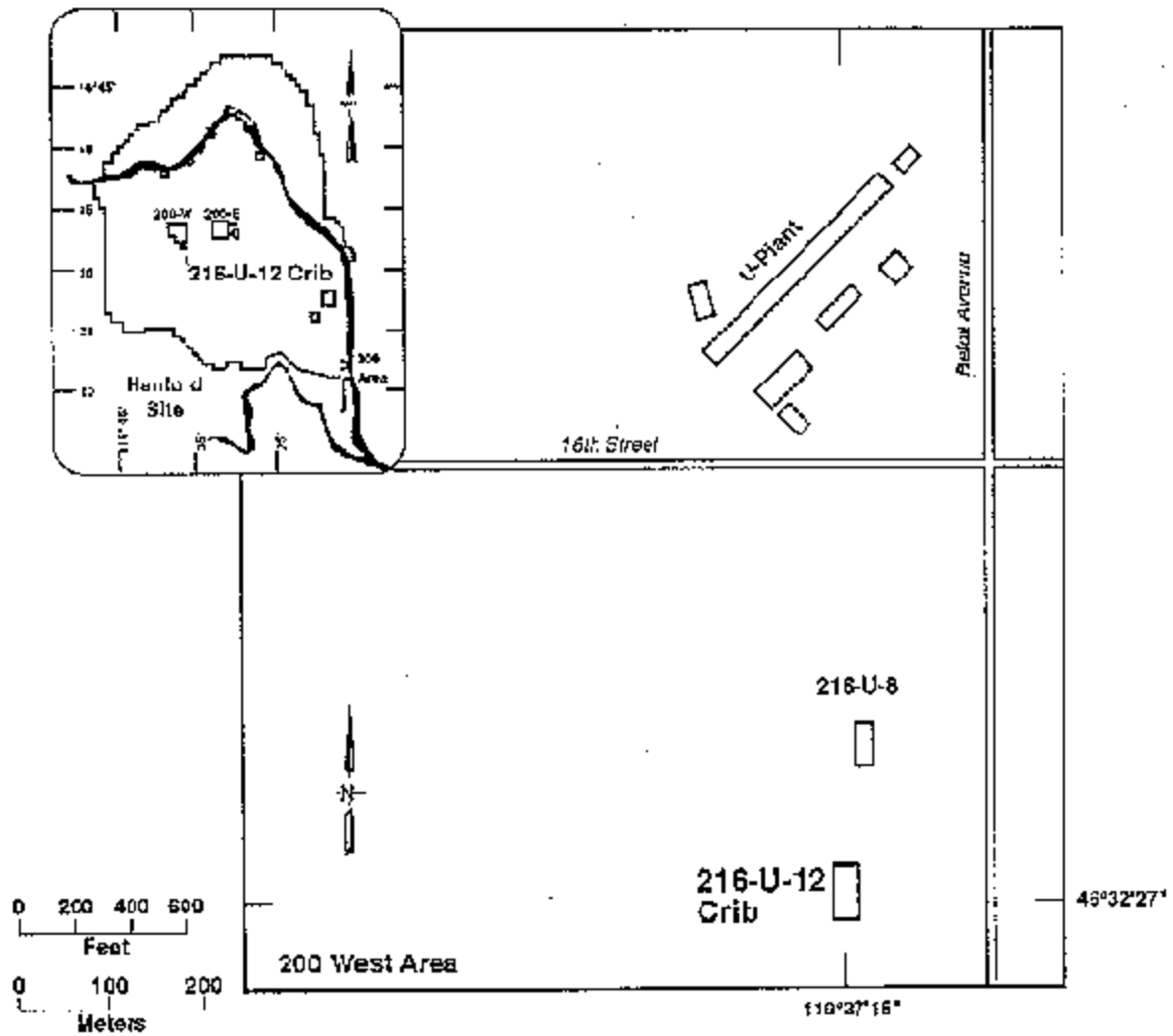
John D. Wagoner
Owner/Operator
John D. Wagoner, Manager
U.S. Department of Energy
Richland Operations Office

6/30/94
Date

Edward S. Keen
Co-Operator
Edward S. Keen, President
Bechtel Hanford, Inc.

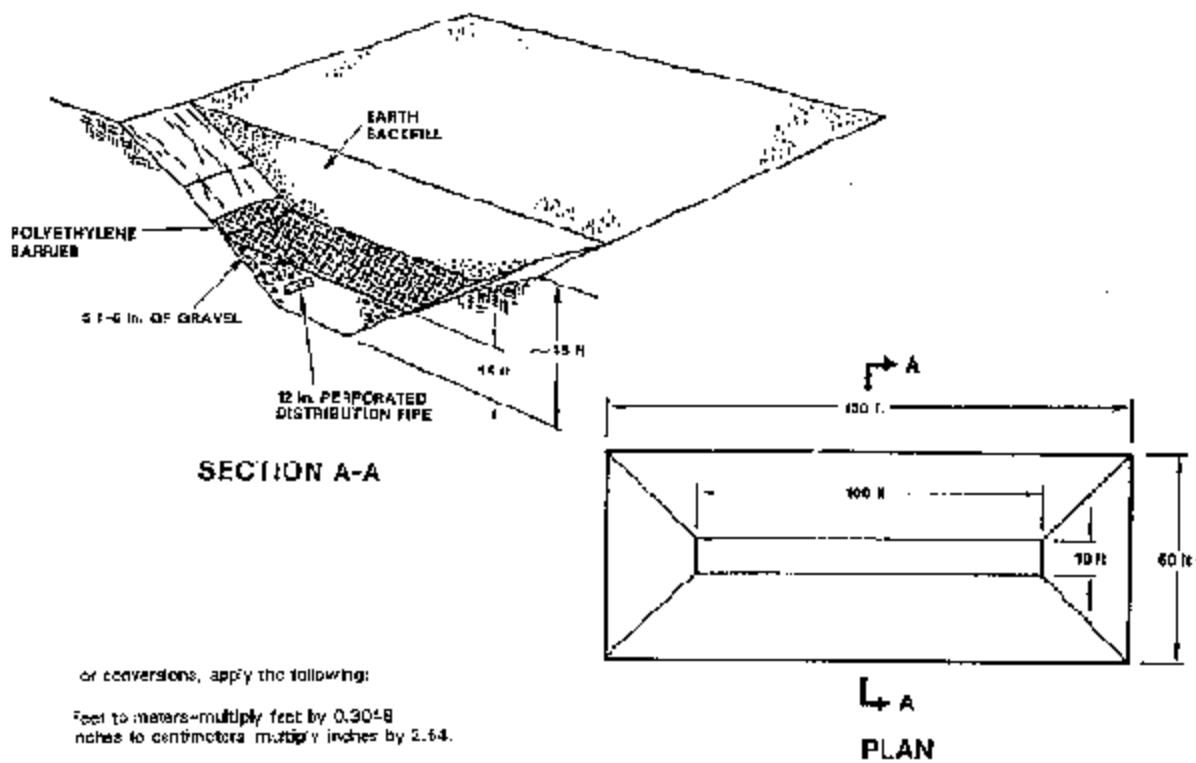
6/30/94
Date

216-U-12 Crib Site Plan



39405155.6

216-U-12 Crib



2B8707-13.80

216-U-12 CRIB



46°32'27"
119°37'15"

8704509-1CN
(PHOTO TAKEN 1987)